THE UNIVERSITY OF CHICAGO

CHICAGO 37 · ILLINOIS

DEPARTMENT OF PHYSICS

1958 **M**ay 1

Dr. Joshua Lederberg Department of Microbiology University of Wisconsin Madison, Wisconsin

Dear Josh:

The enclosed reprints will show you why I was much interested in your "Moondust" paper which Aaron showed me today. I think your points are very well taken, and I hope you publish it. If so, send me a reprint. I think the sizes of the interstellar dust particles however are about 10-30 A instead of 0.5 micron; and that they are mostly free-radicals; like random large organic molecules, with much radiation damage, so that they absorb in the visible region. I suspect the surface of the moon is the same, with recombination and exothermic fusion of these dust particles being balanced finally in a steady state against continued further radiation damage. I suspect this is why the surface of the moon is so black (albedo 7 percent), and that its color may have mothing to do with the nature of the solid rock underneath. The first man who puts a rubber glove on it may have an unpleasant surprise.

Could you send me your 1957 references in detail? I don't recognize some of them. Will you be at the Boulder Conference this summer?

lours,

John R. Platt Professor of Physics see Science 127: 1502-3

JRP:jp